

## EDITOR/ASSEMBLER DISK COMMANDS 1

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## INTRODUCTION TO DISK EDITOR ASSEMBLER :-

THIS MANUAL IS DESIGNED AS AN INSTRUCTION BOOKLET FOR THE DISK EDITOR ASSEMBLER; IT IS NOT DESIGNED TO BE A TUTORIAL IN Z80 ASSEMBLY LANGUAGE PROGRAMMING. IN ORDER TO USE THE EDITOR, THE USER WILL HAVE TO KNOW THE STANDARD FORMAT FOR A Z80 ASSEMBLY LANGUAGE PROGRAM. THE USER MUST ALSO APPRECIATE THE MEANING OF 'SOURCE CODE' AND 'OBJECT CODE'. THIS PACKAGE IS DESIGNED FOR VZ200/300 (VZ200 WITH 16K RAM) WITH DISK DRIVE SYSTEM.

THE PACKAGE OFFERS SEVERAL FEATURES NOT FOUND ON OTHER ASSEMBLERS. ALL LOADING AND SAVING IS TO AND FROM DISK. SOURCE CODE IS SAVED WITH A 'S' PREFIX, OBJECT CODE WITH A 'B' PREFIX IN ORDER THAT IT CAN BE BRUN. AN EXIT TO BASIC IS OFFERED, AND IN MOST CIRCUMSTANCES, THE USER CAN RETURN TO THE EDITOR. THE PACKAGE AUTOMATICALLY MAKES USE OF WHATEVER MEMORY IS AVAILABLE.

## GETTING STARTED ...

TO USE THE DISK EDITOR ASSEMBLER, TYPE BRUN"ASSEM". YOU WILL BE PRESENTED WITH THE TITLE SCREEN. WHILE THE EDITOR ASSEMBLER IS RUNNING, THE BOTTOM LINE OF THE SCREEN IS ALWAYS THE COMMAND LINE, WHETHER IN COMMAND MODE OR EDIT MODE.

NOTICE THE WORD COMMAND - THIS INDICATES THAT YOU ARE IN THE COMMAND MODE. AT ANY TIME, YOU RETURN TO THIS MODE BY PRESSING CTRL BREAK.

THERE ARE FIVE BASIC COMMANDS FOR EDITING, ENTERING AND DISPLAYING TEXT; INSERT, EDIT, DELETE, LIST AND FIND. ONLY THE FIRST LETTER OF EACH IS USED. A FULL DESCRIPTION OF EACH FOLLOWS.

LET'S WRITE A SMALL PROGRAM JUST TO ILLUSTRATE THEIR USE. FROM THE COMMAND MODE, WE ENTER I (FOR INSERT), AND HIT RETURN. THE LINE NUMBER 001 IS PRESENTED, AND WE HAVE A CURSOR. WE NOW ENTER THE FIRST LINE OF OUR PROGRAM:

```
001 CLS CALL 01C9H
```

AND HIT RETURN AT THE END OF THE LINE. NOTE THE -H SUFFIX WHICH MUST BE USED WITH ALL HEX NUMBERS. THE USUAL RUBOUT AND INSERT CONTROLS CAN BE USED WHILE EDITING. WE NOW HAVE LINE 002, AND WE ENTER OUR SECOND LINE:

```
002 JP 1A19H
```

NOTE THAT THERE ARE TWO SPACES BETWEEN THE LINE NUMBER AND THE OPCODE - THIS TELLS THE EDITOR THAT THERE IS NO LABEL ON THIS LINE. WHENEVER WE ENTER A LINE WITHOUT A LABEL, WE MUST HIT THE SPACE BAR BEFORE ENTERING THE OPCODE.

AFTER HITTING RETURN AGAIN, AND HAVING LINE NUMBER 003 DISPLAYED, WE RETURN TO THE COMMAND MODE WITH CTRL BREAK. WE CAN LIST OUR PROGRAM WITH THE L (LIST) COMMAND. WE CAN DELETE LINE 002 WITH THE COMMAND D2. ALTERNATIVELY, WE CAN DELETE BOTH LINES WITH D1:2 (THE COLON INDICATES A RANGE OF LINE NUMBERS). THIS FORMAT CAN ALSO BE USED WITH THE L AND E COMMANDS (SEE DETAILS OVERLEAF). IF WE WANT TO ADD TO OUR PROGRAM, WE RE-ENTER THE EDIT MODE BY ENTERING AN I. IF WE HAD WANTED TO INSERT LINES BETWEEN LINE 1 AND 2, WE WOULD USE I1 (INSERT AFTER LINE 1). LINE RE-NUMBERING IS TAKEN CARE OF BY THE EDITOR.

## LABELS

LABELS MUST OCCUPY THE FIRST FOUR CHARACTER POSITIONS IN A LINE. THE FIRST CHARACTER MUST BE ALPHABETIC, BUT THE OTHERS CAN BE NUMERIC.

## COMMENT LINES

UNLIKE OTHER ASSEMBLERS, THIS ASSEMBLER CANNOT ACCEPT COMMENTS ON THE SAME LINE AS THE OPCODE (DUE TO THE 32 COLUMN WIDTH OF THE VZ). COMMENTS MUST BE PLACED ON A LINE OF THEIR OWN, BEGINNING WITH A SEMI-COLON (;). FOR EXAMPLE:

004 ;THIS IS A COMMENT LINE

## SAVING, LOADING &amp; MERGING

THE FOLLOWING COMMANDS ARE AVAILABLE FOR DISK OPERATION:

TS:FILENAME - SAVE THE SOURCE FILE TO DISK. ONLY THE FIRST EIGHT CHARACTERS OF THE FILENAME WILL BE USED. THE FILE WILL BE SAVED WITH AN 'S' PREFIX, AND CAN BE RELOADED BY THE ASSEMBLER. YOU MAY USE DIGITS IN THE FILENAME, BUT IF YOU DO, THE FILE CANNOT BE DCOPYED OR ERASED FROM BASIC.

TL:FILENAME - LOADS THE SPECIFIED SOURCE FILE FROM DISK. INSERT THE DISK AND CLOSE THE 'DOOR' BEFORE PRESSING RETURN.

TO:FILENAME - SAVES THE CURRENT OBJECT CODE TO DISK. THE FILE IS SAVED WITH A 'B' PREFIX SO THAT IT CAN BE BRUN FROM BASIC. DO NOT USE DIGITS IN THE FILENAME.

TM:FILENAME - MERGES THE SPECIFIED SOURCE FILE FROM DISK WITH THE SOURCE FILE CURRENTLY IN MEMORY. LINE RENUMBERING OCCURS AUTOMATICALLY.

## TB:EXIT TO BASIC

IF AT ANY STAGE YOU WANT TO USE THE OTHER STANDARD DOS COMMANDS, SUCH AS DIR OR ERA ETC, YOU CAN EXIT THE EDITOR AND RETURN TO BASIC BY SIMPLY ENTERING THE TB COMMAND. IN FACT YOU CAN DO WHAT YOU LIKE WHEN IN BASIC, HOWEVER, IF YOU WANT TO RETURN TO THE EDITOR, YOU MUST NOT ALTER MEMORY IN ANY WAY. SIMPLY ENTER X AND RETURN FROM BASIC TO GET BACK TO THE COMMAND MODE OF THE EDITOR.

# DISK CONVERSION FOR THE DICK SMITH EDITOR ASSEMBLER

This software package allows you to convert your old tape-based Disk Smith Editor Assembler to full disk operation. After being converted, your Editor Assembler (EDASM) will use NO MORE MEMORY than usual, and will be capable of loading source files from, and saving both source and object files to disk. Source codes are saved with an 'S' prefix, object codes with a 'B' prefix - they can be BLOADED or BRUN as usual. The conversion process can be split into two stages, where the EDASM is converted initially for Tape Load/Disk Save. Use this version to copy your old source files on to disk (do not attempt to save object files at this stage). The EDASM is then converted for full disk use, which includes a command to exit the EDASM if you need to do a DIRectory, ERAsure or any other DOS command! You may then return to the EDASM with a single command.

## USING THE DISK EDASM :-

When fully converted to disk operation, the EDASM will still use the T- prefix commands for loading/saving/merging. Each command is explained below:

TS:FILENAME - Save a source file to disk. Only the first eight characters of the filename will be used. The file will be saved with a 'S' prefix, and can only be reloaded by the EDASM.

TO:FILENAME - Saves the current object code to disk. The file will be saved with a 'B' prefix, so that it can be loaded and run from BASIC. Do not use any digits in the filename or a 'FILE NOT FOUND' error will occur.

TL:FILENAME - Loads the specified source file from disk. Insert the disk and close the door before pressing RETURN.

TM:FILENAME - Merge the specified filename from disk with the source code in memory. Same procedure as TL.

TB - Exit the EDASM to BASIC. Use this command to enter any other DOS commands, such as DIR or ERA etc. You can return to the EDASM by simply entering: X <RETURN>. Any source code or assembled object code will remain intact, providing you have not altered any memory.

Note: The TV command is no longer supported.

## CONVERTING YOUR EDASM :-

Firstly, you will need a copy of the DSE Editor Assembler on disk. If you have it on tape, start at step 1, otherwise start at step 3.

STEP 1 - Insert Conversion disk. Enter: BRUN"BICOPIER". Insert your EDASM tape in your datassette and press PLAY.

STEP 2 - After tape EDASM has loaded, remove disk from drive and insert a blank, initialised disk. At the top of the screen you should see a command to save the EDASM to disk. Move your cursor up and type you own name (such as EDASM) over 'filename', and then type over the hex numbers which follow. Hit return and the EDASM will be saved to disk. You now have a disk copy of it, but the tape commands still need to be changed.

STEP 3 - To convert your EDASM to tape load/disk save. Insert the disk with your EDASM and enter:

```
BLOAD"(insert its name here)"
```

Now insert the conversion disk, and enter :

```
BLOAD"PATCH A": BLOAD"PATCH B": BLOAD"PATCH C"
```

Replace your EDASM disk, and enter :

```
BSAVE"(insert a new name here)",7AFD,A2A1
```

You have now saved a version of the EDASM for copying your old source files from tape to disk. Do this before proceeding to step 4.

STEP 4 - Converting a tape/disk EDASM to full disk operation. Insert the disk on which the new EDASM was saved. Enter :

```
BLOAD"(the filename you chose)"
```

Now insert the conversion disk and enter :

```
BLOAD"PATCH D"
```

Replace your disk and (finally) enter:

```
BSAVE"(another new name eg: DISKEDAS)",7AFD,A2A1
```

You have now saved a final copy of the EDASM with full disk functions.

If you have any problems, don't hesitate to contact us at:  
P.O Box 154, DURAL NSW 2158